

Report to Congressional Requesters

November 1994

# INTERNATIONAL TRADE

Issues Regarding Imposition of an Oil Embargo Against Nigeria





United States General Accounting Office Washington, D.C. 20548

#### **General Government Division**

B-258609

November 10, 1994

The Honorable Harry Johnston Chairman, Subcommittee on Africa Committee on Foreign Affairs House of Representatives

The Honorable Donald Payne House of Representatives

House Concurrent Resolution 151, passed on July 25, 1994, by the House of Representatives, condemns the actions of Nigeria's military government in thwarting that country's return to civilian and democratic rule and in jailing prominent human rights activists and democratic political leaders. You asked that we assess the potential economic impact of a multilateral oil embargo on Nigeria, the world oil market, and the U.S. economy, in addition to the political viability of undertaking such an action. You also asked us to assess the potential economic impact of a U.S. unilateral oil embargo on Nigeria, the world market, and the U.S. economy, as well as its potential political impact on Nigeria.

### Results in Brief

While a multilateral oil embargo could have a significant economic effect on Nigeria, there is currently little international support for such an action. According to our analysis, a comprehensive, effectively enforced multilateral embargo on Nigerian oil would have a devastating effect on Nigeria's economy because 96 percent of its projected 1994 foreign exchange earnings is expected to come from oil exports.

If completely successful, an embargo could potentially reduce world oil supplies by 1.6 million barrels per day if there were no increase in production from other sources. Such a reduction in supplies could rapidly increase world petroleum prices by as much as \$2 to \$5 per barrel, or by about 5 to 12 cents per gallon of gasoline at the pump. U.S. petroleum and gasoline prices could experience a similar increase. However, Department of Energy analysts believe that any shortfall resulting from an embargo would be offset by other nations' increased oil production, and thus there would be little or no effect on oil prices.

Regarding the political viability of undertaking such an action at this time, it appears that there is little international political support for imposing a multilateral oil embargo, according to U.S. government officials we

interviewed. This lack of support reflects the fact that most nations do not view Nigeria as a major threat to world peace and security.

With respect to a U.S. unilateral embargo on Nigerian oil, such an effort would have almost no impact on Nigeria's oil exports and economy, or the world oil market. Because the world oil market is highly integrated, it could quickly adjust to a disruption in the usual patterns of supply caused by a unilateral embargo. While a unilateral embargo should not significantly affect petroleum availability in the United States, gross domestic product (GDP), or inflation on a national scale, there might be some adverse effects on the sectors of the economy and in those regions of the country involved in importing, refining, and using Nigerian oil. There is also some concern that U.S. commercial interests in Nigeria could be negatively affected.

Lastly, because Nigeria's political opposition is fragemented and its political situation is volatile, it is difficult to forecast how a multilateral or unilateral embargo would influence Nigeria's political environment.

### Scope and Methodology

To assess the potential economic impact and political viability and impact of multilateral and unilateral sanctions on Nigerian oil, we interviewed officials at the U.S. Departments of Energy (DOE), State, and the Treasury. We also interviewed Mobil Corporation officials (Mobil is the largest U.S. oil company operating in Nigeria) as well as a university professor and an international affairs expert, both of whom specialize in African politics. We then analyzed information on the current situation in Nigeria and reviewed our previous work on economic sanctions to provide a sense of how similar U.S. efforts have fared in the past and what parallels could be drawn to the current situation.<sup>1</sup>

To ascertain the potential economic impact on the world oil market and subsequently on the U.S. economy from both types of sanctions, we developed independent estimates of the impact of oil market shocks on world oil prices based on relevant literature. We then compared our estimates of how oil prices could be affected under either scenario with those of DOE. In making these estimates, we took into consideration (1) Nigeria's contribution to the world oil supply, (2) current and projected world market supply and demand for petroleum, and (3) the effect of production changes on the world price of crude oil. We used Data

 $<sup>^{\</sup>rm l}$  See Economic Sanctions: Effectiveness as Tools of Foreign Policy (GAO/NSIAD-92-106, Feb. 19, 1992).

Resources Incorporated's (DRI) macroeconomic model to evaluate the relationship between oil price changes and U.S. GDP and inflation.<sup>2</sup> To identify the legal authority used in imposing either multilateral or unilateral oil sanctions, we obtained and reviewed relevant U.S. and international laws and precedents and interviewed an official at the Department of State's Office of Economic Sanctions Policy.

To assess the accuracy of the data and information we obtained, we consulted multiple public and private sector experts. We did not, however, independently verify the accuracy of the data and information.

On October 18, 1994, we discussed the contents of this report with Department of State officials, including the Country Desk Officer for Nigeria and an international economist from the Office of International Energy Policy. Their comments are presented at the end of this report.

We conducted our work from August to September 1994 in accordance with generally accepted government auditing standards.

### Background

# Nigerian Oil Production and Economy

Nigeria plays a major role in the global oil market. Currently, it supplies as much as 2 million barrels a day of petroleum, or about 3 percent of the current world supply of 67 million barrels per day. The United States imported an average of 736,000 barrels per day of Nigerian oil in 1993, or 9.7 percent of total U.S. oil imports. In that same year, Nigeria ranked third among the Organization of Petroleum Exporting Countries (OPEC) that supply oil to the United States. In the international oil market, Nigeria's crude oil is sought for its low sulfur content and other attributes, which make it easy to refine into more valuable products such as gasoline and jet fuel.

The Nigerian economy is very dependent on oil. Oil production accounts for more than one-third of Nigeria's gross national product (GNP), which in 1994 is projected to be about \$30.6 billion. Further, 1994 projected oil export revenues of \$10.5 billion would account for 96 percent of Nigeria's total export earnings. Nigeria's earnings from petroleum exports are needed to service its \$28 billion external debt and purchase imports.

<sup>&</sup>lt;sup>2</sup>DRI's macroeconomic model is used by researchers to simulate how economic changes (e.g., an increase in oil prices) may affect the economy. This model is frequently used in economic forecasting.

Imports in 1992 were estimated at \$8.1 billion, supplying approximately 29 percent of Nigeria's domestic consumption in that year.<sup>3</sup> According to our calculations, without oil export earnings Nigeria would be unable to continue to import needed commodities or to borrow funds on international capital markets in the future. According to U.S. government sources, Nigeria's nongold international reserves, at \$1.4 billion, are considered low because they are sufficient to pay for only about 2 months of imports. Nigeria's projected 1994 balance on current account (the broadest measure of Nigeria's international trade flows) is expected to be a negative \$2.7 billion.<sup>4</sup>

## Recent Nigerian Political Situation

Nigeria's political environment is complex, with an estimated 250 to 400 distinct ethnic groups and a history of shifts between military and civilian rule. In June 1993, a presidential election was held, part of a process to transfer power to an elected government from the then-ruling military regime. When Moshood Abiola appeared to be winning the election, the military government intervened, citing voting irregularities. In November 1993, General Sani Abacha took over the Nigerian government, a position he continues to hold.

In June 1994, on the anniversary of the 1993 elections, Abiola declared himself the President of Nigeria and was subsequently imprisoned. According to the State Department, human rights violations by the military regime have occurred, and the regime continues to oppose the return to democratic civilian rule.

In July 1994, Nigeria's two oil unions went on strike to pressure the Abacha regime to cede power. By early August, internal opposition groups, which had been split by regional, ethnic, and professional interests, coalesced around the strike, which lasted until early September. Strike supporters included bank workers, university professors, and air traffic controllers. During the strike, oil production declined, but supply was not

<sup>&</sup>lt;sup>3</sup>Import figures for 1992 were the most recent ones available.

<sup>&</sup>lt;sup>4</sup>The "balance on current account" is generally defined as the difference between a country's total exports of goods and services (and foreign aid received) and its total imports.

<sup>&</sup>lt;sup>5</sup>See Nigeria: A Country Study, H.C. Metz, ed., Federal Research Division, Library of Congress, (Washington, D.C.: Government Printing Office, 1992).

<sup>&</sup>lt;sup>6</sup>Specifically, when the partial and unofficial election results showed Abiola leading his sole opponent, Bashir Tofa, the military government of Ibrahim Babangida intervened and halted further announcements of the results. Babangida resigned from office in late August 1993 and handed power over to the unelected government of Ernest Shonekan, General Abacha's predecessor.

completely interrupted. The military government survived this challenge and has replaced the leaders of the oil workers' unions.

In September 1994, the military took other steps to consolidate its power, banning some newspapers and decreeing that the military government did not fall under the jurisdiction of Nigeria's judicial branch. The military regime has, however, convened a national constitutional conference that could be the basis used by the Abacha regime to return power to a civilian administration. Recommendations of the conference are supposed to be presented to General Abacha in January 1995; purportedly, an announcement concerning the cessation of military rule will then be made.

# Legal Authority Regarding Sanctions

#### **Multilateral Sanctions**

The most likely forum for instituting a multilateral embargo would be the United Nations (U.N.) Security Council. If the Security Council were to vote to impose an embargo pursuant to article 41 of the U.N. Charter, the United States could implement this action under the United Nations Participation Act (22 U.S.C. 287c (1988)). The act provides statutory authority to impose sanctions in accordance with a resolution by the U.N. Security Council. However, to authorize sanctions, the Security Council must determine that there is a threat to peace and international security. Specifically, U.N. Charter article 39 authorizes the Security Council to "determine the existence of any threat to the peace, breach of the peace, or act of aggression." To impose a sanction, a resolution of the Security Council must be approved by 9 of 15 Council member votes (currently Nigeria is a member of the Security Council). There are no formal mechanisms to enforce U.N. sanctions, but if a resolution is passed each member nation of the U.N. is required to adopt the necessary national measures to implement the resolution.

#### **Unilateral Sanctions**

The United States has the legal ability to impose a unilateral embargo under the International Emergency Economic Powers Act (IEEPA) (50 U.S.C. 1701-1706 (1988)). IEEPA empowers the President to investigate, regulate, or prohibit transactions with a particular country if a situation exists that threatens the U.S. national interest. To invoke these powers, a national emergency must be declared resulting from any "unusual and extraordinary threat" to national security, foreign policy, or the U.S. economy that has its source outside the United States (see 50 U.S.C. 1701

<sup>&</sup>lt;sup>7</sup>U.N. Charter article 41 contains the authority to use economic sanctions.

(a)). The National Emergencies Act (NEA) (50 U.S.C. 1601 et seq. (1988)) prescribes the procedural requirements governing any presidentially declared national emergency. Implementation of a unilateral oil embargo would require the issuance of an executive order declaring a national emergency in accordance with NEA procedures; the Departments of the Treasury and State would then carry out the executive order and issue implementing regulations. Specifically, Treasury's Office of Foreign Assets Control has chief responsibility for the implementation and administration of such an executive order.

### Potential Effects of a Multilateral Oil Embargo

### Economic Impact on Nigeria

An effective comprehensive multilateral oil embargo would have a devastating effect on Nigeria. Nigerian government revenues—which are heavily dependent on oil export earnings—would dramatically decline, imports of consumer goods and raw materials needed for manufacturing would be sharply reduced, and oil exploration and development would be virtually halted, according to our analysis.

However, imposing an embargo—even a U.N.-sponsored one—without active enforcement would not ensure that the embargo's full economic impact would be realized. Past experience with economic sanctions indicates that they usually have their most significant impact immediately and then taper off. This is because imposing economic sanctions usually gives rise to what is commonly referred to as "sanctions busting"—making a profit evading the sanctions and dealing in the sanctioned commodity. In this case, for example, Nigeria could reduce the price it charges for its crude oil to induce traders to incur the risks associated with evading the sanctions. The price of Nigerian crude oil delivered to market would not necessarily decrease; rather, middlemen could simply make greater profits. Past experience with oil embargoes indicates that this would likely be the case.

Therefore, to achieve the maximum impact, a multilateral embargo would require active enforcement—such as a naval blockade of Nigeria's ports and tanker terminals (Bonny, Lagos, Port Harcourt, Calabar, Sapele, Warri, and Onne). Virtually all of Nigeria's oil is exported through its ports and

terminals. Thus, an actively enforced, multilateral embargo would have the potential to effectively curtail Nigeria's oil exports.

While an effective embargo would have devastating economic consequences for Nigeria, the economic costs associated with a sanction may not necessarily achieve the desired political objectives. In some instances, a sanction may not result in the desired political change because a regime may be sufficiently strong internally that there is little viable internal opposition, as in the case of Iraq after the 1990 Gulf War. But, where there is an internal opposition that can be strengthened by economic sanctions, the sanctions may in fact hasten political change. Regarding Nigeria, however, it is difficult to forecast what political ramifications effective multilateral sanctions would have because of the volatile and fragmented political situation there.

## Economic Impact on the World Oil Market

How a multilateral embargo on Nigerian oil would affect world oil prices would depend in large part on the following factors:

- the reduction in world oil supply created by the embargo,
- the ability and willingness of other producers to increase oil exports to offset the reduction created by the embargo,
- the current level of world crude oil inventories, and
- the price elasticity of demand for oil.8

Further, the impact of a total embargo on Nigerian oil could combine with other factors to affect oil prices. For example, cold winter weather could increase demand for home heating oil, and the threat of war or political instability in other oil-producing nations such as Kuwait or Algeria could reduce oil exports and affect supply and demand relationships in the world oil market. These factors could add to the tightness in the market. Alternatively, a mild winter could reduce the demand for heating oil, offsetting some of the embargo-related tightness in the world oil market.

The world oil market is highly integrated—that is, a complex marketing system ties together world petroleum markets. While the characteristics of oil produced in different fields vary (such as its specific gravity and sulfur content), and different refineries are designed to operate most efficiently with specific types of crude oil, the market can adjust to a disruption in oil

<sup>&</sup>lt;sup>8</sup>"Price elasticity of demand" is the measure of how the quantity demanded of a good or service changes when its price changes: specifically, it is the percentage change in quantity demanded of a good or service divided by the percentage change in its price.

trading patterns by reordering supply relationships. However, for some refineries there could be costs associated with changing operations to refine a different type of crude oil.

A multilateral embargo on Nigerian oil would affect the world oil market if (1) all major oil-importing nations were to participate and (2) it were actively enforced. According to DOE, Nigeria exports about 1.6 million of the 2 million barrels of oil per day it produces, about 5 percent of world oil exports. Our estimates indicated that such a reduction in supplies could rapidly increase world petroleum prices by as much as \$2 to \$5 per barrel, or by about 5 to 12 cents per gallon of gasoline at the pump, if the embargo were completely successful. If an embargo were not effectively enforced or if it were offset by other nations' increased oil production, there would be little or no effect on oil prices. <sup>10</sup>

The current world oil market is estimated to have 3.5 million to 4.3 million barrels a day of excess capacity, according to DOE. This excess capacity, primarily in Saudi Arabia and Kuwait, could offset the loss of Nigerian oil in the world market and avoid the price increase and the macroeconomic costs of a multilateral oil embargo against Nigeria (although it could take several weeks for this capacity to come on line). DOE analysts believe that these nations would increase oil production for two reasons: (1) it is not in the economic interest of Gulf oil producers to have oil prices increase significantly because such an increase could stifle the ongoing world economic recovery and ultimately reduce the demand for their oil and (2) there could be some renewed calls for permitting Iraqi oil exports should Nigerian production be lost.

# Impact on the U.S. Economy

As noted, an effective multilateral embargo that would not be offset by other nations' increasing their production could take 1.6 million barrels a day of Nigerian exports off the world oil market. The economic impact on the United States of such an embargo would depend on the same factors that would affect the world oil market (e.g., the reduction in world oil

<sup>&</sup>lt;sup>9</sup>For additional information on how the world oil market functions, see Energy Security and Policy: Analysis of the Pricing of Crude Oil and Petroleum Products (GAO/RCED-93-17, Mar. 19, 1993).

<sup>&</sup>lt;sup>10</sup>As discussed previously, economic sanctions usually have their most significant impact on prices immediately and then taper off. Thus, an increase in world oil prices would occur immediately after an effective multilateral embargo were imposed or announced and would probably be followed by a gradual decrease in price.

<sup>&</sup>lt;sup>11</sup>While Saudi and Kuwaiti oil could meet overall world demand during such an embargo, North Sea oil would be the most desirable substitute for Nigerian oil because of their similar characteristics.

supply created by the embargo, the ability and willingness of other producers to increase oil exports, etc.).<sup>12</sup>

On the basis of these factors, a reduction in supplies of this magnitude could rapidly increase world petroleum prices in the ranges previously mentioned. According to our simulations, which are based on the DRI economic forecasting model, the effect on U.S. macroeconomic performance would be more substantial as the price of oil or the length of the embargo increased. For example, we estimated that an effective embargo that lasted for 1 year and increased oil prices \$5 per barrel would decrease GDP by two-tenths of 1 percent and increase U.S. consumer prices by as much as three-tenths of 1 percent after the first year. <sup>13</sup> If the embargo were partially offset by other nations' increasing their oil production, the effect on U.S. macroeconomic performance would be less. Further, if an embargo were fully offset, the effect would be zero.

As an example of how world oil prices fluctuate, since early 1994 the price of crude oil in the United States has moved upward, increasing from about \$14.50 per barrel in January to about \$20.50 per barrel at the onset of the Nigerian oil strike in July. By late August, however, prices had declined to the \$17 to \$18 per barrel range.

Lastly, another way to avoid the price and GNP cost of an oil shortfall caused by a Nigerian oil embargo would be to release excess inventory of oil from the U.S. strategic petroleum reserve (SPR). PR consists of U.S. government-stored oil and is supposed to be used to meet U.S. obligations under the International Energy Agency's Emergency Oil Sharing Agreement in the event of an energy supply emergency. Excess inventories could be available for use during an embargo of Nigerian oil imports. However, on the basis of current estimates of world oil supply, DOE believes that use of SPR would not be necessary—even in the event of a complete cutoff of Nigerian production.

<sup>&</sup>lt;sup>12</sup>While there would be an economic cost to the United States and other nations in enforcing a multilateral embargo (e.g., the costs of deploying naval vessels and personnel), we did not attempt to estimate these costs.

<sup>&</sup>lt;sup>13</sup>We made both of these comparisons using the baseline scenario in DRI's macroeconomic model. In using the scenario, we assumed an effective embargo lasting 1 year and involving increased oil prices of \$5 per barrel. This represented the high end of impact estimates and was used to show the greatest possible effect a multilateral sanction could have.

 $<sup>^{14}\</sup>mathrm{Excess}$  inventories are those quantities of petroleum in SPR over and above the amounts the United States is committed to hold to meet International Energy Agency obligations.

### Political Viability of a Multilateral Embargo

According to the State Department, two factors affect the political viability of imposing a multilateral oil embargo on Nigeria. First, Nigeria is not considered a significant international threat when compared with nations currently subject to multilateral sanctions—Iraq, North Korea, Libya, and Serbia. 15 Second, because Nigeria is not viewed as a major threat to world security, nations are reluctant to invest the time and resources needed to encourage internal political reform there. This is especially true because some nations—particularly the Netherlands, France, and the United Kingdom—have large investments in Nigeria that could be at risk if a multilateral oil embargo were imposed. For example, U.S. actions taken to date against Nigeria have not been fully supported by several European allies whose approval would be needed to impose multilateral sanctions. 16 These actions have included denying visas to persons benefiting from the Nigerian military regime and canceling military sales and joint training exercises. In addition, according to officials at several U.S. government agencies, there is little support for a U.N. Security Council resolution imposing a multilateral oil embargo against Nigeria because, as discussed previously, Nigeria is not perceived as a major threat to world peace.

### Potential Effects of a U.S. Unilateral Oil Embargo

### Economic Impact on Nigeria

According to DOE analysts, a unilateral U.S. embargo would not substantially affect the world price of or demand for Nigerian oil, primarily because Nigerian oil exports would be redirected to other markets. Thus, imposing such an embargo would be unlikely to have a material impact on the Nigerian economy because that nation's exports and export revenue would be largely unaffected. U.S. oil industry officials said that given the volume of Nigeria's oil exports, the Nigerian government could perhaps suffer some economic loss (estimated at \$60 million per year) from costs associated with redirecting oil to other markets. These same officials also said that the biggest beneficiary in the event of a unilateral embargo would be the international shipping industry. That industry would have to

<sup>&</sup>lt;sup>15</sup>Of these nations, only Iraq is subject to a multilateral oil export embargo.

<sup>&</sup>lt;sup>16</sup>The United Kingdom has supported some U.S. actions, such as canceling military sales to, and joint training exercises with, Nigeria.

 $<sup>^{17}</sup>$ Nigerian oil workers could also experience some economic hardship from a unilateral embargo.

transport Nigerian oil supplies to different destinations and oil from other exporters to the United States. This possibility represents a likely increase in the total distance that internationally traded oil would have to be shipped.

## Economic Impact on the World Oil Market

A U.S. unilateral embargo on Nigerian oil would not affect the supply of oil on the world market, according to DOE and the State Department. The world oil market is highly integrated and could quickly adjust to a disruption in the usual patterns of supply. Oil is quite fungible—that is, U.S. refiners could rapidly find other sources of supply while Nigeria could find other buyers for its oil. Thus, there would likely be little or no sustained effect on the world price of oil.

# Impact on the U.S. Economy

The potential impact on the U.S. economy of a Nigerian oil embargo depends on whether such an embargo would influence the world price of petroleum and its products. A unilateral oil embargo, like a multilateral embargo, would not significantly affect U.S. petroleum availability, GDP, or inflation on a national scale. But a unilateral embargo could cause temporary adverse effects in some sectors of the U.S. economy and in some regions of the country, according to U.S. government officials familiar with oil issues. Particularly affected would be regions of the country that are directly involved with importing, processing, or refining Nigerian crude oil. For instance, about one-quarter of the oil processed in Pennsylvania, New Jersey, and Virginia during the first 5 months of 1994 was Nigerian, according to data provided by Mobil Corporation officials. Replacing that supply would entail finding alternate suppliers, establishing new contracts, and altering refining capabilities, perhaps at a higher price.

Regarding U.S. business interests in Nigeria, State Department and private sector officials suggested that a unilateral embargo could potentially negatively affect U.S. oil companies with operations there, including Mobil, Chevron, Ashland, and Texaco. According to the State Department, these companies have about \$3.7 billion invested in the Nigerian oil sector. The Nigerian government is also about \$275 million in arrears to these companies, money that would be further at risk in the event of an embargo. Further, there are 7,000 U.S. workers in Nigeria, most of whom work for U.S. oil companies. According to the U.S. embassy in Nigeria, there would be some concern regarding the safety of these workers in the event of unilateral sanctions. Another issue mentioned in our interviews with public and private officials was the precedent for nationalization of

foreign assets in Nigeria. <sup>18</sup> The Nigerian oil assets of British Petroleum, a United Kingdom company, were nationalized in 1978. This was reportedly done to pressure Britain to stop trading with the apartheid-practicing South Africa. Apart from oil interests, the U.S. embassy in Nigeria reported that other U.S. business interests, such as American banks operating in Nigeria, could face potential losses in the event of a U.S. action against that nation. And, according to an international affairs specialist, a unilateral U.S. embargo of Nigerian crude could have a broader global impact on U.S. commercial interests. Specifically, other countries might reconsider the wisdom of dealing with U.S. companies when the specter of unilateral U.S. sanctions looms as a possibility.

### Potential Political Impact of a U.S. Unilateral Oil Embargo on Nigeria

By imposing a unilateral embargo on Nigeria, the United States would be supporting the Nigerian opponents of the military regime. On the basis of our previous work on sanctions, we learned that conditions in the targeted country have an important influence on that country's response to economic sanctions. For example, if the targeted country has a domestic opposition to the policies of the government in power, sanctions can strengthen this opposition and improve the likelihood of a positive political response to the sanctions. But such impacts, by their nature, are difficult to forecast. Further, the Nigerian opposition is not monolithic, making any such prediction about the effect of unilateral sanctions speculative at best.

### **Agency Comments**

We discussed the contents of this report with Department of State officials on October 18, 1994, including an international economist from the Office of International Energy Policy and the Country Desk Officer for Nigeria. The State Department officials agreed with the contents of the report and offered a few clarifying comments. Specifically, they emphasized that the Nigerian government could take a range of economic actions in response to a U.S. unilateral oil embargo. We made appropriate changes to the report on the basis of the State Department's comments and included a more explicit recognition of the options available to the Nigerian government in responding to a U.S. unilateral oil embargo.

<sup>&</sup>lt;sup>18</sup>According to State Department officials, in addition to nationalizing U.S. assets, the Nigerian government could take other economic actions—such as canceling oil exploration and drilling contracts—if the United States imposed a unilateral oil embargo.

We are sending copies of this report to the Secretaries of Energy, State, and the Treasury as well as other interested parties. Copies will be made available to others on request.

Please contact me at (202) 512-4812 if you have any questions concerning the information contained in this report. The major contributors to this report are listed in the appendix.

Allan I. Mendelowitz, Managing Director International Trade, Finance, and

allan R. Mendelowitz

Competitiveness

## Major Contributors to This Report

General Government Division, Washington, D.C. Elizabeth J. Sirois, Assistant Director Kurt W. Kershow, Evaluator-in-Charge Phillip R. Herr, Senior Evaluator Rona H. Mendelsohn, Evaluator (Senior Communications Analyst)

Resources, Community, and Economic Development Division, Washington, D.C. Godwin M. Agbara, Senior Energy Economist

Office of the Chief Economist, Washington, D.C. Joseph D. Kile, Senior Economist

Office of the General Counsel, Washington, D.C. Sheila K. Ratzenberger, Assistant General Counsel Herbert I. Dunn, Senior Attorney

#### **Ordering Information**

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

#### Orders by mail:

U.S. General Accounting Office P.O. Box 6015 Gaithersburg, MD 20884-6015

or visit:

Room 1100 700 4th St. NW (corner of 4th and G Sts. NW) U.S. General Accounting Office Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (301) 258-4066.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (301) 258-4097 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

United States General Accounting Office Washington, D.C. 20548-0001

Bulk Mail Postage & Fees Paid GAO Permit No. G100

Official Business Penalty for Private Use \$300

**Address Correction Requested** 

